

CHAPTER 18 WETLANDS

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18. WETLANDS

18-1 OVERVIEW

18-1.1 Wetland Definition

The Florida Department of Transportation (FDOT) and Federal Highway Administration (FHWA) use the following definitions in defining wetlands:

1. Wetlands, as defined by ***U.S. Department of Transportation (USDOT) Order 5660.1A***, are "lowlands covered with shallow and sometimes temporary or intermittent waters. This includes, but is not limited to, swamps, marshes, bogs, sloughs, potholes, wet meadows, river overflows, tidal overflows, estuarine areas, and shallow lakes and ponds with emergent vegetation. Areas covered with water for such a short time that there is no effect on moist-soil vegetation are not included in the definition, nor are the permanent waters of streams, reservoirs, and deep lakes."
2. Wetlands, as defined by ***33 CFR 328.3(b)*** and as used by the U.S. Army Corps of Engineers (COE) in administering the ***Section 404*** permit program, include:
 - "(c) The term "wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."

Both definitions include three basic elements for identifying wetlands: 1) hydrology, 2) vegetation, and 3) soils.

18-1.2 Federal Wetlands Jurisdictional Authority

Federal jurisdictional authority over wetlands is derived from ***Section 404*** of the ***Clean Water Act***, 1972, as amended in 1979. ***Section 404*** relates to the discharge of fill material in "waters of the U.S.", including wetlands, and establishes the COE as the federal agency responsible for permitting wetland impacts, with oversight by the U.S. Environmental Protection Agency (EPA). The U.S. Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS) serve in an advisory role to the COE with respect to potential wildlife or threatened and endangered species issues as authorized in the ***Fish and Wildlife Coordination Act***, 1934, as amended.

Section 404 of the ***Clean Water Act*** also established a state regulatory authority over wetlands as they relate to water quality impacts. In Florida, state authority over activities in surface waters and wetlands is administered by the Water Management Districts (WMDs) and the Florida Department of Environmental Protection (DEP). The Florida Fish and

Wildlife Conservation Commission (FWC) advises the WMDs and DEP on wildlife issues as a requirement under the basis of review of Environmental Resource Permits.

18-1.3 Federal Highway Administration Policy

Presidential Executive Order (EO) 11990 entitled, "Protection of Wetlands", dated May 23, 1977, establishes a National Policy to "avoid to the extent possible the long-term and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative".

The USDOT in implementing **EO 11990** set forth its policy on wetlands in **USDOT Order 5660.1A**, Preservation of the Nation's Wetlands, dated August 24, 1978, which is "to assure the protection, preservation, and enhancement of the Nation's wetlands to the fullest extent practicable during the planning, construction, and operation of transportation facilities and projects. New construction in wetlands shall be avoided unless there is no practicable alternative to the construction and the proposed action includes all practicable measures to minimize harm to wetlands which may result from such construction. In making a finding of no practicable alternative, economic, environmental, and other factors may be taken into account. Some additional cost alone will not necessarily render alternatives or minimization measures impractical since additional cost would normally be recognized as necessary and justified to meet national wetland policy objectives."

In carrying out **USDOT Order 5660.1A**, FHWA has implemented its wetland policy through **Technical Advisory T6640.8A, October 30, 1987**, which provides guidance on the preparation of environmental documents, including the assessment of project impacts on wetlands.

The Technical Advisory prescribes a wetland evaluation methodology which calls for:

1. The identification of all wetland involvements along a project corridor.
2. An evaluation of project impacts on each wetland site.
3. An evaluation of all project alternatives including avoidance alternatives.
4. An evaluation of the significance of each wetland site.
5. An evaluation of the uniqueness of each wetland site.
6. An evaluation of the function/value of each wetland site.
7. A formal wetlands finding stating that no practical alternatives to the wetland taking exist, if such is the case.
8. An evaluation of all practicable measures to minimize harm to wetlands.

9. An evaluation of the reasonableness of mitigation measures proposed to reduce adverse impacts.

Toward fulfilling the Technical Advisory guidance on wetland evaluation, FHWA recognizes the FWS Classification System as the standard for wetland identification. The Uniform Mitigation Assessment Method (UMAM) **Chapter 62-345 F.A.C.** or the Wetland Rapid Assessment Procedure (WRAP) are used to evaluate the functions and values of each wetland. WRAP analysis may need to be used in order to utilize a mitigation bank that was permitted under WRAP and not UMAM.

As per the **September 4, 1998, FHWA letter on "Future Use of WRAP for NEPA Documents"**, the WRAP analysis may be used on all new projects, and at the preparer's discretion may replace Wetland Evaluation Technique (WET II), or hydrogeomorphic evaluation model (HGM) on any project currently in progress.

Regarding mitigation of impacts, FHWA's policy is contained in **23 CFR 777.11**, as amended, and in the **Environmental Policy Statement** issued on April 20, 1990. FHWA will "fully participate in the costs of environmental mitigation for project impacts that are necessary to satisfy federal law while ensuring that mitigation necessitated by state law and all environmental enhancement measures represent a reasonable expenditure of highway funds", as per the FHWA **Environmental Policy Statement**. Mitigation policy in **23 CFR 777.11(f)** states that "the reasonable cost of acquiring lands, or interests therein, to provide replacement lands with equivalent wetlands functions for privately owned wetlands that are directly affected by a federal-aid highway project is eligible for federal participation". A more complete statement of FHWA policy regarding wetland mitigation is contained in **Section 18-2.4.1**.

It is FHWA's preference in project development for the Department to reach early resolution with all federal and state regulatory agencies and regulatory review agencies regarding acceptable mitigation measures for a project. An integration of the **National Environmental Policy Act (NEPA)** process with **Section 404(b)(1)** Guidelines is desirable, and will be consistent with the Local Operating Agreement (LOA) in **Section 18-2.7**. Coordination with all parties including FHWA and documentation of all coordination and agreements must be a part of the Wetland section of the **NEPA** document.

For projects that are not federally funded such as SEIRs it is recommended that the process be the same or similar to federally funded projects in the event that federal funding is needed at a later time or to avoid any unnecessary delay when requesting permits from federal agencies.

18-1.4 FDOT Project Development and Environment Process

In fulfilling the requirements of **EO 11990**, FHWA requires that potential wetland impacts be addressed at the following stages: Advance Notification (AN), Class of Action

(COA) Determination, the public involvement program, and the environmental document. **Figure 18.1** provides a flow chart of the wetland evaluation process.

FDOT will determine the project's involvement with wetlands from information included in the Final **Programming Screen Summary Report**. A good starting point is to review Environmental Technical Advisory Team (ETAT) comments and degree of effect determinations for the "Wetlands" issue in the Final **Programming Screen Summary Report**. It may be helpful to also review ETAT comments on other issues such as "Coastal and Marine" and "Water Quality and Quantity". Comments by DEP and WMDs are especially important. The Final **Programming Screen Summary Report** may state specifically that a wetland evaluation or a **Wetland Evaluation Report (WER)** is needed in the "List of Technical Studies" section of the report. Other sections of the report may be useful such as the "General Project Commitments" and "Permits" sections. The DEP and applicable WMD may respond to the AN in the "AN Feedback Summary" section of the Final **Programming Screen Summary Report** that includes specifics on wetland impacts. At the beginning of the PD&E process it is **important** to contact the applicable agency to confirm their recommendations made during the Environmental Screening Tool (EST) screening events and to ensure that all issues are addressed.

The COA Determination establishes if a wetland involvement exists, and, to some extent, the magnitude of that involvement. Once approved by FHWA (or other Lead Federal Agency), the COA Determination specifies which type of environmental document must be prepared: a Type 2 Categorical Exclusion (CE), an Environmental Assessment (EA), an Environmental Impact Statement (EIS), or a State Environmental Impact Report (SEIR).

Regardless of the environmental document to be produced, wetland impacts must be addressed as established in **Section 18-2.3**. Wetland evaluations and impact analyses conducted during the Project Development and Environment (PD&E) phase are contained in the **Wetland Evaluation Report (WER)** technical document. The **WER** contains an identification and description of the wetland resources involved, a wetland functional assessment by UMAM and if needed WRAP, and an analysis of impacts from various project alternatives. The **WER** also contains an evaluation of options for impact avoidance and minimization, and options for compensatory mitigation of unavoidable impacts.

Potential wetland involvements are addressed in the environmental document required for each project as described in **Section 18-2.5**. A formal wetlands finding is required for all projects processed as Type 2 CEs, EAs, and EISs. In reaching this finding, the administrative record should document the evaluation of alternatives and measures to minimize harm for these actions.

Potential wetland involvements must also be identified in the Public Hearing advertisement and presentation procedure as described in **Section 18-2.6**.

18-2PROCEDURE

18-2.1 Advance Notification

During plan development, the proposed project is entered into the EST by the Efficient Transportation Decision Making (ETDM) Coordinator (See the ***ETDM Planning and Programming Manual***). The Purpose and Need for the project is identified, and logical termini are located on a GIS based map. The Advance Notification (AN) package is distributed electronically as part of the programming screening event on the EST (***Part 1, Chapter 3 Advance Notification***).

Wetland information is included in the Environmental Information: Wetland section of the ***AN Fact Sheet*** and includes the results of GIS analysis for the issue using available GIS data and applicable maps. If the project went through a Planning Screen this section will also include a summary of agency comments, and if available a list of permits that may be required and a list of technical studies that may be needed. The AN should indicate whether or not the proposed action will have a wetland involvement by providing an indicator of potential involvement with wetland resources within at least 500 ft. of the proposed project and identify the location of any wetlands under the jurisdiction of the COE and/or the DEP and WMDs. Additional known information on Wetlands may be added to the “Other Project Documents” section of the ***AN Fact Sheet***. The AN must not draw any conclusions regarding the significance of the wetland involvement, since this would constitute a wetlands finding (***Part 1, Chapter 3***).

18-2.2 Class of Action Determination

. The Class of Action Determination (***Part 1, Chapter 2***) is made for each project during the final stages of the Programming Screen. Upon completion of the Class of Action Determination and approval by FHWA (or other Lead Federal Agency), the document selected will be a Type 2 CE, an EA, EIS, or SEIR depending on the level and anticipated significance of the total project involvement and federal involvement. For any document having a wetland involvement, a wetland evaluation will be conducted consistent with ***Section 18-2.3***.

18-2.3 Wetland Evaluation Report

The following methods, as established in ***FHWA Technical Advisory T6640.8A***, must be employed to assess and evaluate the impacts of a proposed project on wetlands. Each wetland site with a potential involvement is identified and evaluated individually as prescribed in this chapter. This information will be contained in the ***Wetland Evaluation Report (WER)*** for the project. The ***WER*** is a technical document or memo (as warranted) required for all projects with a wetland involvement, and is prepared by FDOT environmental scientists or contracted consultants with sufficient training and experience. The ***WER*** is retained within the project file and summarized for the ***NEPA*** document. The elements of the ***WER*** should:

1. Delineate each wetland according to the "**Federal Manual for Identifying and Delineating Jurisdictional Wetlands**" (COE, 1987) and "**The Florida Wetlands Delineation Manual**" (DEP, 1995). Boundaries may be delineated with the aid of U.S. Geological Survey (USGS) topographic maps, National Wetlands Inventory (NWI) maps, Natural Resource Conservation Service (NRCS) soil surveys, aerial photos, and field observation.
2. Classify each wetland using the Florida Land Use Cover Classification System (FLUCCS) and the FWS classification system as described in "**Classification of Wetlands and Deepwater Habitats of the United States**". FWS Classification should be to the subclass level only unless sufficient information has been accumulated to accurately identify dominant vegetation, water regime, water chemistry, or soil types. FLUCCS should be to Level 3 only, unless sufficient information has been accumulated to accurately assign a Level 4 classification. In using the FWS Classification System, the analyst should note that a singular wetland may be identified as two or more wetland types, if there are major differences in vegetational structure or site hydrology. A map should be included showing the location, boundaries, and classification (using both systems) of all wetland sites.
3. Establish a baseline characterization of the wetlands involved. For each wetland, there should be a discussion of the following:
 - a. Size
Provide an estimate of the size, in acres, of each involved wetland. Size should be determined from topographic maps, NWI maps, or aerial photographs utilizing the boundaries previously identified. The estimate should be for both the entire wetland system as well as the specific area affected by the proposed project.
 - b. Contiguity

Describe the contiguity of each wetland to surface water systems (lakes, rivers, streams, and estuaries) by identifying its principal contiguity type. Generally, wetlands can be placed in one of the four following contiguity categories:
 - (1) Perched or isolated from a regional surface water drainage system, including flats and depressions.
 - (2) Joined to a regional drainage system by an indistinct natural connection or by a small or partly obscured ditch.
 - (3) Joined to a regional drainage system by distinct natural connections or by a well-defined ditch or canal.

- (4) Contiguous to or within a primary regional drainage way, including tidal and fringe systems.

c. Vegetative Structural Diversity

Discuss each wetland's vegetative structural diversity, considering both vertical and horizontal diversity. For vertical diversity, indicate how many vegetative strata (i.e., ground cover, shrub, and tree canopies) are present and if these are well or poorly established. For horizontal diversity, identify any distinct vegetational zones that are present based on dominant plant constituents, either by species or, where definitive information is lacking, by general plant life form (e.g., woody vs. herbaceous, trees vs. shrubs).

d. Edge Relationships

Indicate the types of land uses which occur in habitats bordering each affected wetland. Describe the nature of the ecotone that adjoins the wetland, including the area encompassed, general location, and major plant constituents or plant life forms.

e. Wildlife Habitat Value

Describe the wildlife habitat value of each wetland, focusing on significant species or animal groups likely to make routine use of these habitats. Animal groups may include such categories as waterfowl, wading birds, upland game birds, raptors, big-game animals, sport fishes, listed species, and endemics. In evaluating habitat value, consideration should be given to the importance of the wetlands as cover habitat, breeding habitat, and feeding habitat. It is also important to realize that small wetlands often fall below the minimum home range requirements of many animal species; hence, these animals must utilize additional habitats for fulfillment of their life requisites.

f. Hydrologic Functions

Discuss the primary hydrologic functions of each wetland, with emphasis on the following functional properties:

- (1) Water Quality Enhancement / Pollution Abatement - capacity to retain or absorb waterborne particulates or chemical compounds.
- (2) Water Detention / Flood and Erosion Control - capacity to regulate surface water runoff, reducing downstream peak flows during flood periods and maintaining base flows during dry periods.

- (3) Ground Water Recharge/Discharge - capacity to interact with subsurface aquifers.

g. Public Use

Identify the potential public uses of each wetland, including:

- (1) Recreational, scientific, or cultural uses or values.
- (2) Food and fiber (timber) uses.
- (3) Public water supply system uses.
- (4) Special use classifications or designations (Eg. Outstanding Florida Water, Outstanding Natural Resource Water, etc.)

h. Integrity

Identify any physical alterations or influences resulting from human activities which have significantly affected the structure and/or function of the wetland. Consider regional hydrology alterations, exotic species infestations, point and non-point pollution sources, etc.

4. Evaluate the functions of a representative wetland of each principal type, utilizing baseline information and the Uniform Mitigation Assessment Method (UMAM) or the Wetland Rapid Assessment Procedure (WRAP).
5. Utilizing the UMAM or WRAP results, estimate the importance of the affected wetlands to the surrounding biological community, including :
 - a. Importance of primary wetland functions (e.g., flood control, wildlife habitat, erosion control, etc.).
 - b. Relative importance of these functions to the total wetland resources of the area.
 - c. Importance of the uniqueness of each wetland.
6. Utilizing the UMAM or WRAP results, evaluate and describe the effects the project will have on wetland functions, and determine the significance of each alternative's impact on each wetland site, including:
 - a. Effects on flood control, erosion control, water pollution abatement, and wildlife habitat value

- b. Effect on stability and quality of the wetland system
 - c. Short-term vs. long-term effects
7. Discuss the proposed project's potential contribution to indirect and cumulative impacts to the identified wetlands, utilizing the UMAM or WRAP results. Take into consideration losses resulting from direct and indirect takings of the project as well as impacts resulting from other development activities in the vicinity.
 8. Identify and discuss alternatives which could avoid impacting wetlands.
 9. Identify and discuss practicable measures to minimize harm to each wetland site. Minimization involves the use of any measures included in the Department's ***Standard Specifications for Road and Bridge Construction*** which will be implemented to minimize the effects to wetlands during construction. This could include such measures as alignment selection, bridging, altered slope ratios, varying median width, etc.
 10. Discuss the mitigation options considered and describe those measures incorporated into the project and those rejected as a result of consultation, economy, reasonableness, etc. In considering the practicability of alternatives to the proposed action, the analyst should remember: 1) the practicability of alternatives is considered only for those actions that involve "new construction" in wetlands; 2) the consideration of alternatives should take into account only those alternatives that involve wetland avoidance or avoidance of new construction in wetlands, and not those that are, in essence, mitigative; and, finally, 3) the consideration of avoidance alternatives should take into account all relevant environmental and economic factors. Additional cost will not necessarily render alternatives impractical in meeting the national wetland policy objectives set out in ***EO 11990***.
 11. Document all consultation and coordination with the COE, FWS, EPA, NMFS, DEP, WMDs, and other appropriate federal, state, and local agencies concerning the impacts of the proposed project on wetland systems. Where problems are identified, reach a resolution with each respective agency, if possible. Document resolution with all federal and state agencies or provide an explanation of why resolution cannot be reached.

18-2.4 Conceptual Mitigation Plan

18-2.4.1 Federal Highway Administration Policy and Participation

The EPA and COE ***Memorandum of Agreement (55 CFR 48; March 12, 1990)*** defines three types of mitigation: avoidance, minimization, and compensation. The three types are to be employed in sequence, with avoidance being the first measure utilized to

reduce impacts. Compensatory mitigation includes actions such as wetland preservation, restoration, enhancement, or creation.

USDOT Order 5660.1A specifically directs that avoidance and minimization be the first measures employed. While the Department and FHWA have the authority to restore and enhance existing wetlands and to create new wetlands, these do not counterbalance the effects of adverse impacts to wetlands which are avoidable or satisfy USDOT policy for the preservation of wetlands pursuant to **USDOT Order 5660.1A**.

If, after careful consideration, it has been determined that the no-build and the avoidance alternatives are not practical minimization efforts, FHWA will support and fund reasonable levels of compensation to mitigate the portion of the impact which remains after minimization, as per the **Federal Highway Environmental Policy Statement of April 20, 1990**. All funding for environmental mitigation must be based on scientifically valid analysis and must show documented support of how the cost was arrived to mitigate the adverse impact. Federal participation, as described in **23 CFR 777.11**, will be based on "professional judgment as to the appropriate extent of replacement, using the best available and appropriate scientific tools for wetland evaluation and impact assessment", including the UMAM or WRAP functional evaluation methodologies and/or coordination meetings with regulatory agency personnel. Generally, the mitigation actions set out above (preservation, restoration, enhancement, and creation) then become applicable for consideration.

Federal funding for off-site mitigation is permitted in all cases where it can be shown that it is a necessary and reasonable expenditure. Off-site mitigation should have a direct correlation between the wetland functions that will be adversely affected and the mitigation option selected. Ideally, the replacement wetland should be located in the same watershed or tidal regime. Wetland functions gained from the mitigation proposal should approximate the lost values as closely as possible. Where out-of-kind mitigation is proposed, it must be clearly supported through documentation by the appropriate permitting agencies.

As per the **March 10, 1981, FHWA letter on "Florida-Wetland Mitigation"**, the planned mitigation can be finalized in one of three phases of project development. First, it can be described in the environmental document. If it is later determined that it is "necessary and prudent to change from specific commitments made in the environmental document, these will be addressed in the reevaluation process".

18-2.4.2 Procedure

Avoidance and minimization alternatives are the first methods of mitigation utilized to reduce wetland impacts. Design considerations practiced by FDOT to reduce project impacts often are not perceived by regulatory agencies as constituting mitigation measures; however, the Department should continue to promote avoidance and minimization of impacts in its design and seek regulatory agency acknowledgment for doing so in the Type 2 CE, EA, Draft EIS, or SEIR documents and during interagency

coordination. Any remaining impacts which cannot be avoided or minimized must be addressed with a conceptual mitigation plan which discusses potential compensatory mitigation activities.

As per **S. 373.4137 F.S.**, compensatory mitigation of wetland impacts resulting from FDOT projects as of July 1, 1997, will be implemented by the appropriate Florida WMD where the impacts occur. FDOT will fund such compensatory mitigation activities at a rate of \$75,000 per impact acre (1997 dollars adjusted for inflation), with implementation to be performed by the WMDs. Mitigation performed by a WMD must be coordinated with COE and must satisfy all state and federal mitigation requirements. Specific information concerning the procedure for implementing the provisions of **S. 373.4137 F.S.** are included in **Part 1, Chapter 12 Environmental Permits**.

FDOT will document a clear commitment to mitigate for unavoidable impacts either through the provisions of **S. 373.4137 F.S.** or through an individual project conceptual mitigation plan. If **S. 373.4137 F.S.** is identified as the proposed method of implementing mitigation, conceptual mitigation plans will be addressed through a standard statement. Type 2 CE projects will address conceptual mitigation plans through the following standard statement:

Wetland impacts which will result from the construction of this project will be mitigated pursuant to S. 373.4137 F.S. to satisfy all mitigation requirements of Part IV. Chapter 373, F.S. and 33 U.S.C.s. 1344.

For EA and EIS projects available for public review, the standard statement will be expanded to provide more detailed information for the purposes of public information. EA and EIS projects will address conceptual mitigation plans through the following standard statement:

Wetland impacts which will result from the construction of this project will be mitigated pursuant to S. 373.4137 F.S. to satisfy all mitigation requirements of Part IV. Chapter 373, F.S. and 33 U.S.C.s. 1344. Under S. 373.4137 F.S., mitigation of FDOT wetland impacts will be implemented by the appropriate Water Management District where the impacts occur. Each Water Management District will develop a regional wetland mitigation plan on an annual basis to which addresses the estimated mitigation needs of FDOT. The Water Management District will then provide wetland mitigation for specific FDOT project impacts through a corresponding mitigation project within the overall approved regional mitigation plan. FDOT will provide funding to the Water Management District for implementation of such mitigation projects.

If additional project-specific information (E.g. site selection, conceptual planning) is available on the individual mitigation project to be utilized, then this information will also be included within the conceptual mitigation section of the **NEPA** document.

For those projects which cannot be mitigated through **373.4137 F.S.** due to cost or site availability, FDOT will develop a project-specific conceptual mitigation plan which identifies

the site of proposed mitigation and the general types of mitigation (creation, restoration, enhancement, or preservation) to be utilized. Preservation mitigation can generally not be used alone and can only be utilized when it is part of a larger project involving other creation, restoration, or enhancement mitigation activities.

All mitigation measures proposed must be related to the actual adverse functional impact caused by the project as identified by the UMAM or WRAP evaluation. In order to replace the functions identified in the UMAM or WRAP analysis, the conceptual mitigation plan should be developed consistent with the guidelines contained in the FHWA publication, "**A Guide to Wetland Functional Design (1990)**". In determining the appropriate mitigation to be implemented, the Department must consider the following:

1. Functional capacity of the impacted wetlands
2. Potential for functional improvement to the mitigation site
3. Environmental, social, and economic costs to the community

To minimize delays and controversy after approval of the final environmental document, the Department should determine whether or not the required permits are achievable based on the current project design and specifications. FHWA requires that every attempt be made to reach resolution with all federal agencies, DEP and WMDs regarding wetland issues and mitigative measures prior to approving the final environmental document. Early resolution of federal permit agencies' concerns and joint agreement on appropriate mitigation is promoted by FHWA among their federal counterparts. Such early agreements should substantially reduce delays during the permitting process.

However, if mitigation of wetland impacts remains an area of disagreement, then the environmental document must describe all of the mitigation measures proposed, the reasons for acceptance or rejection by the Department, and the extent of coordination accomplished to reach a resolution. The Department must determine what actions, if any, will be needed to obtain the necessary permits in order to pursue the proposed project, given such disagreement on acceptable mitigation. This information is contained in the Wetland section and the Comments and Coordination section of the **NEPA** document.

18-2.5 National Environmental Policy Act Documentation

The **NEPA** document in general will include a summary of the relevant wetland information and evaluations contained in the **WER** technical document. Documentation will be presented proportional to the magnitude of the involvement and the type of document produced. The same procedure may be followed for SEIRS.

18-2.5.1 Type 2 Categorical Exclusion

Projects which are categorically excluded may have a wetland involvement as long as this involvement is determined not to be significant. A UMAM or WRAP functional evaluation as described in **Section 18-2.3** will be conducted for any proposed Type 2 CE project involving wetlands. Should this analysis indicate a significant involvement, the project cannot be further processed as a Type 2 CE project.

Once a project has been determined to be categorically excluded, the **Project Development Summary Report (PDSR)** becomes the Type 2 CE document. The **PDSR** contains the Wetlands Finding (which must include the rationale used to reach the determination that the proposed project will have no significant short-term or long-term adverse impacts to wetlands, that there is no practicable alternative to construction in wetlands, and that all measures have been taken to minimize harm to wetlands. The UMAM or WRAP evaluation should be concisely summarized in the suggested **PDSR** with detailed information contained in the project file.

Documentation for projects determined by FHWA (or other Lead Federal Agency) to be categorically excluded must contain sufficient detail to substantiate the Wetland Finding contained in the **PDSR**. All data developed to address wetlands as outlined in **Section 18-2** of this chapter are included in the **PDSR** or appended, as appropriate. The Type 2 CE can include a concise summary of the wetland evaluation, with all support material contained in the project file. Projects approved as Type 2 CEs proceed to the design phase of project development without further processing.

18-2.5.2 Environmental Assessment and Draft Environmental Impact Statement

18-2.5.2.1 Affected Environment Section of Draft Environmental Impact Statement

The discussion of wetlands in the Affected Environment section of a Draft EIS is generally limited to an overall description of the wetland environment within proposed project alignments. Documentation usually includes:

1. A description of all wetland systems in the project vicinity (i.e. size and function).
2. A map showing the relationship of the project to the wetlands identified.

This section does not include an evaluation of the potential impacts of the project on these wetlands, but introduces the fundamental characteristics of the wetland systems.

18-2.5.2.2 Impact / Environmental Consequences Sections of Environmental Assessment or Draft Environmental Impact Statement

All documentation for EA and Draft EIS projects involving new construction in wetlands must contain an evaluation of potential wetland impacts to the level of detail appropriate for the involvement. Impact evaluations will be comprised of a summary of the relevant elements of the **Wetland Evaluation Report**, including the UMAM or WRAP analysis

described in **Section 18-2.3**. The following impact discussion must be included in the Wetlands section of the EA / Draft EIS environmental document:

1. An identification of all wetlands located within proposed project alignments using the FWS Classification System, along with a citation of the FWS Classification System as that used to classify each wetland, and an identification of all wetlands using the FLUCCS.
2. A discussion of the importance of the wetlands identified to the surrounding biological community. This includes consideration of:
 - a. Primary functions of the wetlands (e.g., flood control, wildlife habitat, erosion control, etc.).
 - b. Relative importance of these functions to the total wetland resources of the area.
 - c. Other factors, such as uniqueness, that may contribute to the wetland's importance.
3. A description of the impacts of each viable alternative on the wetlands identified, including the area impacted per site (both directly affected by dredge and fill and indirectly affected by project activities) and the potential loss of wetland function. This includes evaluation of:
 - a. Effects on the stability and quality of the wetlands.
 - b. Short-term and long-term effects on the wetlands.
 - c. Significance of any wetland loss on primary functions and values.
4. An identification and evaluation of alternatives which would avoid wetland impacts.
5. An identification of all practicable measures used to minimize wetland impacts.
6. Exhibits showing the location of wetlands identified in relation to each alternative under consideration including alternatives to avoid construction in wetlands.
7. A discussion of conceptual mitigation efforts necessary to compensate for unavoidable impacts to wetlands, as described in **Section 18-2.4.2**, based on the results of the wetland functional analysis (UMAM or WRAP). Mitigation measures which should be considered include:
 - a. Creation of new wetlands from upland areas.

- b. Restoration of disturbed wetlands.
- c. Enhancement of existing wetlands.
- d. Acquisition of private wetlands for preservation.
- e. Mitigation pursuant to **S. 373.4137 F.S.**

All mitigation should be summarized at the end of the Wetland section. Mitigation commitments must be reiterated in the Commitments and Recommendations section.

- 8. A discussion of coordination with COE, FWS, EPA, NMFS and other agencies on the proposed avoidance and minimization activities and conceptual mitigation measures to limit adverse impacts.

18-2.5.3 Finding of No Significant Impact and Final Environmental Impact Statement

When there is no practicable alternative to an action which involves new construction in wetlands, the Finding of No Significant Impact (FONSI) or the Final EIS must contain the "Wetlands Finding" required by **EO 11990** and **USDOT Order 5660.1A**.

Approval of the FONSI or Final EIS containing this finding will document compliance with the requirements of **EO 11990**. The finding must contain in summary form the following information:

- 1. A reference to **EO 11990**.
- 2. A discussion of the basis for the determination that there are no practicable alternatives to the proposed action.
- 3. A discussion of the basis of the determination that the proposed action includes all practicable measures to minimize harm to wetlands.
- 4. A standard concluding statement as follows:

Based upon the above considerations, it is determined that there is no practicable alternative to the proposed construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.

The Wetlands Finding statement must be placed in the Summary of a Final EIS (**Part 2, Chapter 3**).

Areas of disagreement are identified in the Unresolved Conflicts portion of the Summary and detailed in the Wetlands section and Comments and Coordination section of the FONSI or Final EIS.

18-2.6 Public Notice of Wetland Involvement

In compliance with **Executive Order 11990**, the public hearing advertisement for projects must include a statement informing the public of any wetland involvement on a project, as described in **Part 1, Chapter 11**. In addition, the public hearing presentation made by the Department must also mention any wetland involvement for a project, to increase public awareness of wetland impacts and invite public comment.

18-2.7 Integrating National Environmental Policy Act and Section 404(b)(1) Guidelines

Integration of **NEPA** and **Section 404(b)(1)** Guidelines is accomplished by the merger of common elements in the two decision making processes. Coordination with FHWA, COE, EPA, FWS, NMFS, DEP, and WMDs to the point of acceptance of these common elements will facilitate this end. The common elements are:

1. Project Need
2. Wetlands Identification, Delineation, and Classification
3. Wetlands Impact Assessment
4. Alternatives Analysis
5. Avoidance and Minimization Analysis
6. Conceptual Mitigation
7. Coordination

For projects which may have significant or potentially significant impacts on the human environment and, at a minimum, would require the preparation of an Environmental Assessment and issuance of an Individual Permit from the COE pursuant to **Section 404** of the **Clean Water Act**, the **Local Operating Agreement (LOA) "Merging The Section 404 and NEPA Process in Florida,"** will be followed. This **LOA** is not intended to be used for projects that will have minimal impacts to wetlands or water resources regulated under the **Clean Water Act**.

18-2.7.1 Process

The **WER** developed during the PD&E phase serves as the basis for referencing the common elements identified above. The **WER** provides technical guidance on wetland

impact assessment and mitigation analysis which supports both the **NEPA** and **Section 404(b)(1)** Guidelines decision making processes. The report, including the UMAM or WRAP analysis, will be contained in the wetland evaluation portion of the project file. Major elements of the **WER** are abbreviated in the **NEPA** document and summarized in the Wetland Finding. The **WER** also documents all coordination activities and the acceptance or concurrence of other agencies on critical elements. A lack of acceptance or concurrence on any of these elements would also be documented in the report. The common elements documented in the **WER** which are relevant to both **NEPA** and **Section 404(b)(1)** Guidelines are detailed below:

1. **Project Need** - The need statement will contain traffic projections, safety information, network planning, land use information, etc. as supporting evidence for the need of the project.
2. **Wetlands Identification, Delineation, and Classification** - The identification, delineation, and classification will be developed according to the procedures described in **Section 18-2.3 Wetland Evaluation Report**.
3. **Wetlands Impact Assessment** - The assessment of potential impacts to wetland functions will be developed using the information obtained in the identification and delineation procedure, and utilizing UMAM or WRAP as detailed in **Section 18-2.3 Wetland Evaluation Report**.
4. **Alternatives Analyses** - Each alternative, including the no-project alternative, will be analyzed for all wetland involvements.
5. **Avoidance and Minimization Analysis** - The analysis will document practicable measures considered to avoid and/or minimize wetland impacts. **NEPA** documents should clearly indicate the steps taken for avoidance and minimization of impacts in order to eliminate the need to reassess and justify project design during the permitting phase.
6. **Conceptual Mitigation Plan** - A conceptual mitigation plan for unavoidable wetland impacts will be developed in the **NEPA** phase and refined during the permitting process. The conceptual mitigation plan should attempt to replace the loss of functions as identified in the UMAM or WRAP analysis.
7. **Coordination** - The coordination (written and oral) used to arrive at acceptance or disagreement on the elements contained in the **WER** will be documented. Coordination with federal, state and local regulatory agencies is necessary to the point that the permits are achievable and FHWA (or other Lead Federal Agency) participation is probable.

18-2.8 Wetland Impacts Permitting

Permitting of wetland impacts to satisfy regulatory requirements of **Section 404(b)(1)** Guidelines is discussed in **Part 1, Chapter 12**, including FDOT procedures for wetland mitigation with respect to **SB 1986**.

18-2.9 Reevaluation

If wetland impacts or mitigation strategies change during phases following PD&E, then these changes will be documented in the appropriate phase reevaluation or design change reevaluation as per **Part 1, Chapter 13**. Commitments and coordination should be contained in the Mitigation Status and Commitment Compliance section of the suggested **Project Reevaluation Format**.

18-3 REFERENCES

1. Letter, titled "Florida-Wetland Mitigation", from P.E. Carpenter, FHWA Division Administrator to Jay Brown, Director of Road Operations, March 10, 1981.
2. U.S. Department of Transportation, Federal Highway Administration, October 30, 1987. Guidance for Preparing and Processing Environmental Section 4(f) Documents, FHWA Technical Advisory T6640.8A.
3. U.S. Department of Transportation Order 5660.1A, titled, "Preservation of the Nation's Wetlands", August 24, 1978.
4. Presidential Executive Order 11990, titled, "Protection of Wetlands", May 23, 1977.
5. U.S. Army Corps of Engineers, Wetland Evaluation Technique (WET), Volume II: Methodology, October 1987.
6. Uniform Mitigation Assessment Method. Chapter 32-345 FAC
7. Federal Highway Administration, "Environmental Policy Statement". Thomas D. Larson, April 20, 1990.
8. Florida Department of Transportation, Efficient Transportation Decision Making (ETDM) Planning and Programming Manual.
9. Federal Interagency Committee for Wetland Delineation, 1989. Federal Manual for Identifying and Delineating Jurisdictional Wetlands. U.S. Army Corps of Engineers, U.S. Department of Interior - Fish and Wildlife Service, U.S. Environmental Protection Agency, and U.S.D.A. Soil Conservation Service, Washington, D.C.
10. U.S. Department of Transportation, Federal Highway Administration, Report No. FHWA-IP-90-010. A Guide to Wetland Functional Design, July 1990.

11. U.S. Department of Interior - Fish and Wildlife Service, "Classification of Wetlands and Deepwater Habitats" of the United States. FWS/OBS-79/31, December 1979.
12. Federal Register, Vol. 56, No. 67, April 8, 1991. "Mitigation of Impacts to Privately Owned Wetlands." 23 CFR 777.11(f).
13. Federal Register, Vol. 51, No. 219, November 13, 1986. "Regulatory Programs of the Corps of Engineers; Final Rule". 33 CFR 328.3(b).
14. Public Law 85-624, Fish and Wildlife Coordination Act of 1934. U.S. Department of Interior - Fish and Wildlife Service.
15. Standard Specifications for Road and Bridge Construction, Florida Department of Transportation, 1991.
16. Federal Register, Vol. 55, No. 48, March 12, 1990. "Memorandum of Agreement (MOA); Clean Water Act Section 404(b)(1) Guidelines; Correction."
17. Letter, titled "Future Use of the Wetland Rapid Assessment Procedure (WRAP) for National Environmental Policy Act (NEPA) Documents," from R. M. Callan, FHWA Acting Division Administrator to Dr. John Hall, COE, September 4, 1998.
18. Local Operating Agreement "Merging The Section 404 and NEPA Process In Florida," 1998.

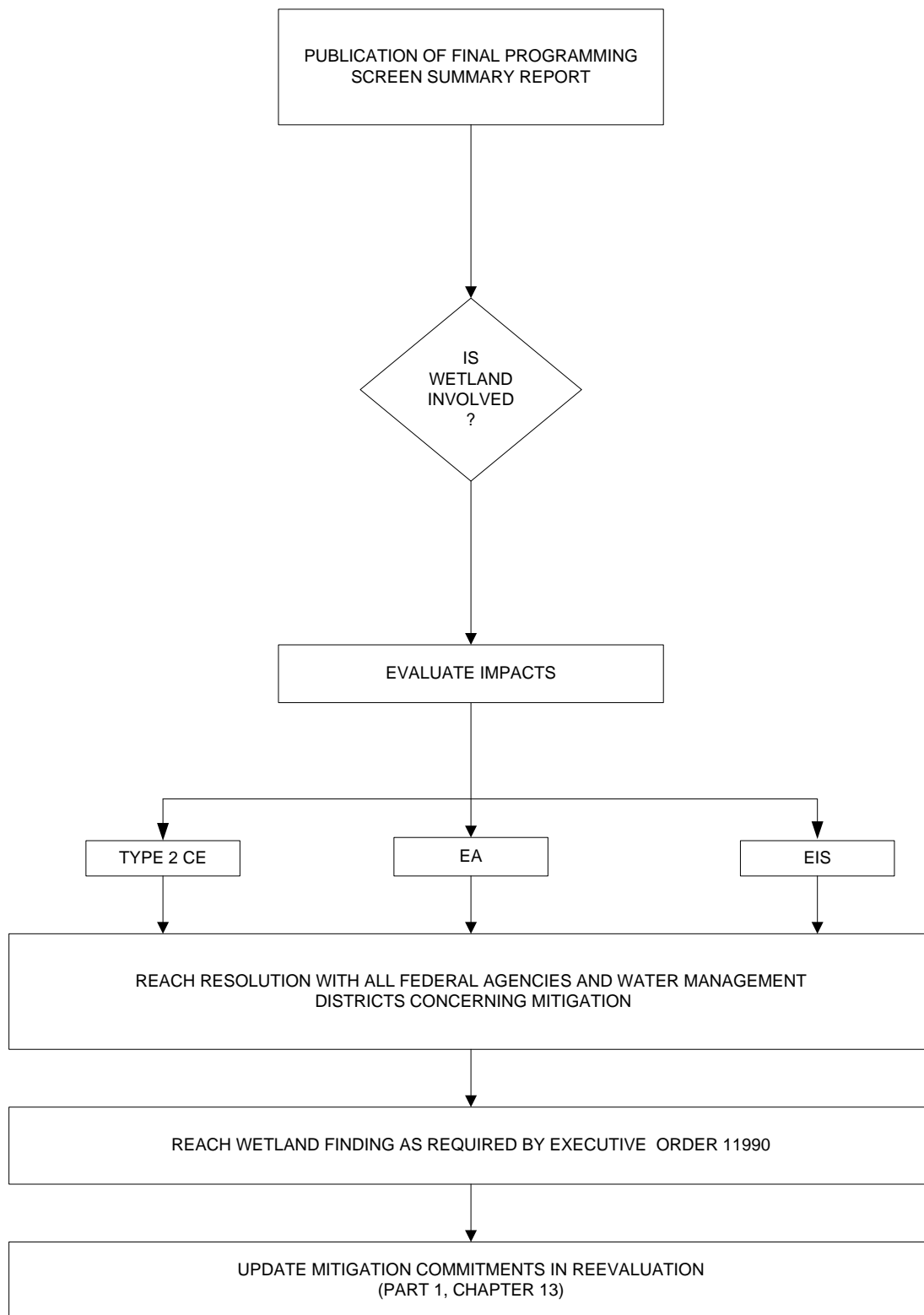


Figure 18.1 Wetland Evaluation Process